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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

FORSLÖW

Atty. Ref.: 2372-5; Confirmation No.

Appl. No. 09/087,496

TC/A.U. 2665

Filed: May 29, 1998

Examiner: Toan D. Nguyen

For: DYNAMIC QUALITY OF SERVICE RESERVATION IN A MOBILE
COMMUNICATIONS NETWORK

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March 29, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Technology Center 2600

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REQUEST FOR RECONSIDERATION

In response to the Official Action dated December 29, 2003, Applicants respectfully request reconsideration.

The Examiner contends that the declaration is defective because "the serial number and the filing date of the specification are not filled out in the blank on page 1 of the declaration." Applicant traverses this requirement. This application was filed with the declaration executed by the inventor. The declaration checks the appropriate box in this situation indicating that the specification "is attached hereto." Indeed, at that time, no serial number had yet been assigned. When a declaration is filed at the same time that the application is filed, there is no need for the filing date and the application serial

number to be filled out. Applicant respectfully requests that this requirement be withdrawn.

Applicant notes with appreciation the Examiner's allowance of claims 49-57, 60-66, 68-75, and 77-79. Applicant also notes with appreciation the Examiner's withdrawal of the rejection of claims based upon Fan et al.

Claims 115-116 and 118-121 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent 5,999,518 to Nattkemper et al. This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). Nattkemper fails to satisfy this rigorous standard.

Nattkemper contends that wireline telecommunication networks are typically formed in a "tree" structure where a central office is connected to several switching units which are each connected to several smaller switching units along the "branches" of the tree. At the lowest level of switching units, each unit is connected to one or more customer premises equipment (CPE) units. This tree/branch structure requires that each switching system at each level in the hierarchy store address and routing information for

all CPE units it services. Nattkemper seeks to avoid a establishing, maintaining and updating address and routing storage information for the entire network at each switching system therein.

A distributed telecommunications switching subsystem is employed that includes switching subsystems or "channel banks." See Figure 9. The ATM switch 1110 is coupled to several distributed channel banks 1102, 1104, and 1106 which are coupled together in a daisy-chain configuration. Each channel bank is referred to as an ATM bank controller unit (ABCU), and includes a controller as well as several subscriber interface cards referred to as asymmetric digital subscriber line (ADSL) cards. Each channel bank stores a list of addresses to which it compares each received data packet. If the data packet address corresponds to an address in the stored list, the packet is transmitted to the CPE via a corresponding ADSL card. Otherwise, that channel bank forwards the data packet to another channel bank which performs a similar packet address comparison to its address list. As a result, each channel bank only stores a limited number of addresses pertaining to customers directly serviced by that channel bank and is effectively independent of other channel banks in the system. This allows service expansion with minimal modification of the existing structure.

In contrast to Nattkemper, the rejected claims relate to communications:

in a mobile radio communication systems having plural mobile radio hosts communicating with a radio network over a radio interface using radio resources from a pool of radio resources allocated to the plural mobile radio host.

Both independent claims 115 and 118 include this language. Nattkemper does not disclose:

- a mobile radio communication system
- plural mobile radio hosts
- a radio network
- a radio interface, or
- radio resources

Claims 115 and 118 further recite that:

a packet session is established over the radio interface for a mobile radio host using radio resources from the pool during which plural application flows are communicated with an external network entity, each application flow having a corresponding stream of packets, and a corresponding quality of service parameter is defined for each of the plural application flows such that different quality of service parameters may be defined for different ones of the application flows.

Nattkemper fails to disclose establishing the packet session over a radio interface with a mobile radio host using radio resources. Nattkemper fails to disclose that the session with that single mobile radio host includes plural application flows, where each flow corresponds to a stream of packets and different flows to the same mobile radio host during the same session may have different quality of service parameters.

The Examiner ignores these features of claims 115 and 118, possibly because they are recited in the preamble of those claims. But the Examiner is ignoring that both of claims 115 and 118 recite a "radio packet network node" that is to be used in the very

context defined in these preambles. The Examiner fails to identify where Nattkemper discloses a radio packet network node.

In addition, preambles cannot be ignored. As explained by the Federal Circuit, a "claim preamble has the import that the claim as a whole suggest for it." *Bell Communications Research, Inc. v. Vitalik Communications Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995). The Federal Circuit has also mandated that "if the claimed preamble is 'necessary to give life, meaning, and volatility' to the claim, then the claim preamble should be construed as if in the balance of the claim." *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999).

Here, the very subject of claims 115 and 118 is a radio packet network node. It is improper to ignore the preamble recitations that relate to packet radio communications. Moreover, the bodies of both claims 115 and 118 explicitly refer back to two words that have been defined in their respective preambles: "session" and "mobile radio host." In order to conduct a packet session with a mobile radio host, the preamble specifies that the mobile radio host communicates: "with a radio network over a radio interface using radio resources from a pool of radio resources allocated to the plural mobile radio hosts." A mobile radio host is not disclosed in Nattkemper.

The word "session" is also defined in the preambles as being "established over the radio interface for a mobile radio host using radio resources from the pool during which plural application flows are communicated with an external network entity." There is no teaching in Nattkemper of plural application flows ("each application flow having a

corresponding stream of packets") being communicated with the mobile radio host.

Indeed, all that is shown is a fixed wireline communication between the ADSL card and the CPE block as shown in Figure 9. There is no radio interface, there is no mobile radio host, no radio resources, and no radio packet network node. There is no disclosure of a packet session with the CPE in Nattkemper that includes plural application flows. Nor does Nattkemper disclose that each such flow in a single session may have a different quality of service parameter.

Both claims 115 and 118 recite that packets are merged "from different sessions with a same quality of service destined for a different mobile radio host within the same geographical area." Where does Nattkemper disclose "different mobile hosts within a same geographical service area?" Where does Nattkemper teach merging packets from different sessions with the same quality of service destined for different mobile radio host within a same geographical service area? In addition to not disclosing a mobile radio host, there is no discussion of grouping mobile radio hosts (or even CPEs for that matter) as being within or not being within a geographical service area. This is because the concept of mobility of a mobile radio host only makes sense in the context of a mobile radio communications system, which is not disclosed by Nattkemper.

Thus, the Examiner improperly ignores many features recited in independent claims 115 and 118. The anticipation rejection based on Nattkemper is improper and should be withdrawn. If the Examiner elects to maintain this rejection, the Examiner is requested to specifically identify where each of the recited elements from the claim both

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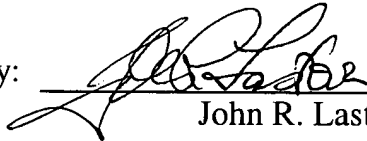
in the preamble and in the body of claims 115 and 118 as identified above as missing is explicitly described by Nattkemper.

The application is now condition for allowance. An early notice to that effect is respectfully requested.

Respectfully submitted,

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